



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/685,384	10/10/2000	Lin He	SP00-291	4601

22928 7590 04/28/2003

CORNING INCORPORATED
SP-TI-3-1
CORNING, NY 14831

EXAMINER

JOHNSON, EDWARD M

ART UNIT	PAPER NUMBER
----------	--------------

1754

DATE MAILED: 04/28/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/685,384

Applicant(s)

HE ET AL.

Examiner

Edward M. Johnson

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-29 and 31-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29 and 31-34 is/are allowed.
- 6) ☒ Claim(s) 1 and 3-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 3-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Saito et al. US 5,935,529.

Regarding claim 1, Saito '529 discloses an exhaust gas catalyst system for nitrogen oxides into ammonia (see abstract and column 2, lines 19-21) comprising supports of titania, zinc oxide, or magnesium oxide (see column 5, lines 3-9) impregnated with noble metals such as platinum, palladium, and iridium (see abstract and column 6, lines 37-50 and 60-63).

Regarding claim 3, Saito '529 discloses 0.1% or less (see column 6, lines 50-52).

Regarding claims 4-5, the claimed range includes zero and Saito '529 discloses iridium (see abstract).

Regarding claims 6-7, 10-11, 14-15, the claimed range includes zero and Saito '529 discloses 5% or less cesium and/or potassium (see column 6, lines 21-28).

Art Unit: 1754

Regarding claims 8-9, 12-13, 16-21, the claimed range includes zero and Saito '529 discloses 5% or less of oxides of lanthanum and cerium (see column 5, lines 56-58 and column 6, lines 22-26 and 32-35).

Regarding claims 22-28, the claimed range includes zero and Saito '529 discloses 5% or less cesium and/or potassium (see column 6, lines 21-28) and 5% or less of oxides of lanthanum and cerium (see column 5, lines 56-58 and column 6, lines 22-26 and 32-35).

3. Claims 1 and 3-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobylinski et al. US 3,907,968.

Regarding claim 1, Kobylinski '968 discloses a catalyst for removing NO_x to ammonia (see column 4, lines 61-66) comprising supports of magnesia and titania impregnated with (see column 4, lines 6-8 and 45-49) metal ruthenates (see column 3, lines 50-63).

Regarding claim 3, Kobylinski '968 discloses 0.05-0.5% Ru (see Experiment 13).

Regarding claims 4-28, all the claimed ranges include zero and Kobylinski '968 discloses composite oxides of Mo, Mn, Cs, Ba, K, and Ce (see column 3, lines 20-25 and 50-63).

Allowable Subject Matter

4. Claims 29 and 31-34 are allowed.

Art Unit: 1754

5. The following is a statement of reasons for the indication of allowable subject matter: A catalyst comprising the compound of the formula of the instant claim 29 would not have been obvious to one of ordinary skill in the art at the time the invention was made.

Response to Arguments

6. Applicant's arguments with respect to claims 1 and 3-28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pomot '073 discloses a catalyst for removal of NO_x, wherein ammonia is produced comprising various catalyst metals (see abstract and Examples); Komatsu '976 discloses a nitrogen oxide converter to ammonia for purifying exhaust gases (see column 1, lines 9-12 and column 2, lines 46-50) comprising impregnated carriers and catalysts of various metals (see abstract and Examples).

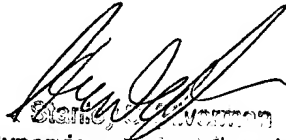
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 703-305-0216. The examiner can normally be reached on M-F 6:30-4:00.

Art Unit: 1754

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

EMJ
April 23, 2003


Stanley S. Silverman
Supervisory Patent Examiner
Technology Center 1700